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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/482,156	01/12/2000	Jonathan Trostle	50325-080	6624

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EXAMINER	
SHERR, CRISTINA O	

ART UNIT	PAPER NUMBER
3621	

DATE MAILED: 07/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/482,156	TROSTLE ET AL.	
	Examiner	Art Unit	
	C. Owen Sherr	3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-30 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-30 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

1. Claims 1 – 30 were examined.

Information Disclosure Statement

2. The information disclosure statement submitted on January 3, 2001 was filed after the mailing date of the January 8, 2001 on January 12, 2001. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the petition is granted and the information disclosure statement is being considered by the examiner.

Specification

3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1- 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dondeti et al (US 6,240,188B1) in view of O'Toole, jr. et al (US 6,279,112 B1).

6. Dondeti discloses a method for securely establishing communication in a multicast group of nodes of a network, in which the network includes publisher nodes, subscriber nodes, a multi-master directory that stores information about events in the network and that can authenticate the subscriber nodes and the publisher nodes, whereby each of the subscriber nodes and the publisher nodes receives a unique

private key and that can determine events that the subscribers and the publishers may process, the method comprising the steps of registering the subscribers and the publishers with an event server configured to determine whether the publishers are authorized to produce certain events corresponding to the event types and whether the subscribers are authorized to receive the certain events in response to the step of accessing; generating, with the event server, a group session key for establishing one of the multicast groups, the group session key being encrypted in a message that has a prescribed format (Col. 3 on 19-35); further comprising the steps of receiving a message from the subscribers in response to the subscribers determining whether the received message corresponds to a correct key version; updating the group session key; and selectively reregistering the subscribers at the event server (Col. 3 on 19-35); wherein the prescribed format of the message conforms with lightweight directory access protocol (LDAP) (Col. 3 on 19-35); wherein the prescribed format of the message comprises a protocol version number field, a message type field, and a message length field (Col. 3 on 19-35); wherein the step of authenticating comprises controlling access by the directory in conjunction with utilizing an external authentication service that allows extending membership of the multicast groups to subscribers with no corresponding objects in the directory (Col. 3 on 19-35); wherein the external authentication service is supplied by a Kerberos server (Col. 3 on 19-35); wherein the event server manages the private keys of the subscribers and the publishers (Col. 3 on 19-35); wherein the step of updating comprises creating a new group session key modifying the objects based upon the new group session key by using a change password protocol; sending a new message that contains the new

group session key to the subscribers; and notifying the subscribers to reregister (Col. 3 on 19-35).

7. Dondeti does not, however, disclose a method as recited in Claim 1, above, wherein the step of registering comprises performing access control check of the subscribers by the event server (O'Toole, col. 11, ln 9 – 34). O'Toole, however, does, as noted above. It would be obvious to one of ordinary skill in the art to combine the teachings of Dondeti and O'Toole to obtain greater security in the distribution of data over a network.

8. Claims 10 - 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dondeti et al (US 6,240,188B1) in view of O'Toole, jr. et al (US 6,279,112 B1).

9. Dondeti discloses a communication system for creating a plurality of secure multicast groups in a network that includes a plurality of principals configured for functioning as a subscriber and a publisher, each of the principals having a private key, a multi-master directory comprising a directory server for communicating with one or more of the principals to authenticate each of the principals and to provide access control, the multi-master directory controlling access on a per object and per attribute basis, the communication system comprising an event server coupled to the plurality of principals for registering the plurality of principals and for determining whether the principals are authorized to produce certain events when the principals are functioning as publishers and whether the principals are authorized to receive the certain events when the principals are functioning as subscribers, and means in the event server for creating a group session key for establishing one of the multicast groups, by distributing the group session key in an encrypted message to the subscribers, the

encrypted message encapsulating the group session key according to a prescribed format; means in the event server for updating the group session key by utilizing a change password protocol to modify an object in the directory; means in the event server for notifying the subscribers to reregister in response to the updating of the group session key (Col. 3 on 19-35); wherein the directory server is collocated with the event server, the directory server and the event server participating in a common one of the multicast groups (Col. 3 on 19-35); wherein the prescribed format of the message conforms with lightweight directory access protocol (LDAP) (Col. 3 on 19-35); wherein the directory authenticates by controlling access in conjunction with utilizing an external authentication service that allows extending membership of the multicast groups to subscribers with no corresponding objects in the directory (Col. 3 on 19-35); wherein the external authentication service is supplied by a Kerberos server (Col. 3 on 19-35); wherein the prescribed format of the message comprises a protocol version number field, a message type field, and a message length field (Col. 3 on 19-35); wherein the event server manages the private keys (Col. 3 on 19-35); wherein the event server updates the group session key by performing the steps of creating a new group session key; modifying the objects based upon the new group session key by using a change password protocol; sending a new message that contains the new group session key to the subscribers; and notifying the subscribers to reregister (Col. 3 on 19-35).

10. Dondeti does not, however, disclose a system as recited in Claim 10, above, wherein the event server performs access control check of the subscribers during registration of the subscribers (O'Toole, col. 11, ln 9 – 34). O'Toole, however, does, as

noted above. It would be obvious to one of ordinary skill in the art to combine the teachings of Dondeti and O'Toole to obtain greater security in the distribution of data over a network.

11. Claims 19 - 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dondeti et al (US 6,240,188B1) in view of O'Toole, jr. et al (US 6,279,112 B1).

12. Dondeti discloses a computer system for establishing multiple secure multicast groups, the computer system comprising a communication interface for communicating with a plurality of nodes and for interfacing a multi-master directory to authenticate the computer system and the plurality of nodes, the multi-master directory having access controls on a per object and per attribute basis, wherein the nodes access the directory to determine events that the nodes may process, a bus coupled to the communication interface for transferring data; one or more processors coupled to the bus for selectively generating a group session key and private keys corresponding to the plurality of nodes, the group session key being updated by utilizing a change password protocol to modify an object corresponding to the events in the directory; and a memory coupled to the one or more processors via the bus, the memory including one or more sequences of instructions which when executed by the one or more processors cause the one or more processors to perform the steps of registering the plurality of nodes, determining whether the nodes are authorized to produce and authorized to receive certain events corresponding to objects of the directory, distributing the group session key to the nodes via a message, the message encapsulating the group session key according to a prescribed format, and selectively reregistering the nodes in response to updating the group session key (Col. 3 on 19-

35); wherein the directory server is collocated with the event server, the directory server and the event server participating in a common one of the multicast groups (Col. 3 on 19-35); wherein the prescribed format of the message conforms with light weight directory access protocol (LDAP) (Col. 3 on 19-35); wherein the directory authenticates by using authentication services of the directory in conjunction with a Kerberos service that allows extending membership to the multicast groups to nodes with no objects in the directory (Col. 3 on 19-35); wherein the event server manages private keys of the plurality of nodes (Col. 3 on 19-35); wherein the event server updates the group session key by performing the steps of creating a new group session key; modifying the objects based upon the new group session key by using a change password protocol; sending a new message that contains the new group session key to the subscribers; and notifying the subscribers to reregister (Col. 3 on 19-35).

13. Dondeti does not, however, disclose a system as recited in Claim 19, above, wherein the computer system performs access control check of the nodes during registration (O'Toole, col. 11, ln 9 – 34). O'Toole, however, does, as noted above. It would be obvious to one of ordinary skill in the art to combine the teachings of Dondeti and O'Toole to obtain greater security in the distribution of data over a network.

14. Claims 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dondeti et al (US 6,240,188B1) in view of O'Toole, jr. et al (US 6,279,112 B1).

15. Dondeti discloses a computer-readable medium carrying one or more sequences of instructions for securely establishing communication in a multicast group of nodes of a network, in which the network includes publisher nodes, subscriber nodes, a multi-master directory that stores information about events in the network and

that can authenticate the subscriber nodes and the publisher nodes, whereby each of the subscriber nodes and the publisher nodes receives a unique private key and that can determine events that the subscribers and the publishers may process, wherein execution of the one or more sequences of instructions by one or more processors causes the one or more processors to perform the steps of registering the subscribers and the publishers with an event server, the event server determining whether the publishers are authorized to produce certain events corresponding to the event types and whether the subscribers are authorized to receive the certain events in response to the step of accessing; generating a group session key for establishing one of the multicast groups, the group session key being encrypted in a message that has a prescribed format (Col. 3 on 19-35); further comprising the steps of receiving a message from the subscribers in response to the subscribers determining whether the received message corresponds to a correct key version; updating the group session key; and selectively reregistering the subscribers at the event server (Col. 3 on 19-35); wherein the step of (Col. 3 on 19-35); authenticating comprises controlling access by the directory in conjunction with (Col. 3 on 19-35); utilizing an external authentication service that allows extending membership of the multicast groups to subscribers with no corresponding objects in the directory (Col. 3 on 19-35); wherein the step of updating comprises creating a new group session key; modifying the objects based upon the new group session key by using a change password protocol; sending a new message that contains the new group session key to the subscribers; and notifying the subscribers to reregister (Col. 3 on 19-35).

16. Dondeti does not, however, disclose a medium as recited under claim 26, above, wherein the step of registering comprises performing access control check of the subscribers by the event server (O'Toole, col. 11, ln 9 – 34). O'Toole, however, does, as noted above. It would be obvious to one of ordinary skill in the art to combine the teachings of Dondeti and O'Toole to obtain greater security in the distribution of data over a network.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

18. Kocher et al (US 6,289,455B1) discloses a method and apparatus for preventing piracy of digital content.

19. Aronberg et al (US 6,117,188A) discloses a system and method using token processing to control software distribution and desktop management in a computer network environment.

20. Any inquiry concerning this communication from the Examiner should be directed to C. Owen Sherr, whose telephone number is (703) 305-0625. The Examiner can normally be reached on Mondays through Fridays from 8:30 AM – 5:00 PM.

21. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, James Trammell, can be reached at (703) 305-9768. The FAX phone number for this group is (703) 305-7687.

22. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist, whose telephone number is (703) 305-3900.

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